

AMENDMENTS TO THE CLAIMS

This listing of Claims will replace all prior versions, and listings, of Claims in the application:

LISTING OF CLAIMS

1-32. (Cancelled).

33. (Currently Amended) A method of screening for an agent which modulates the function of a protein comprising the amino acid sequence of SEQ ID NO:5, comprising
incubating a mixture comprising:

an isolated protein comprising the amino acid of SEQ ID NO:4 (HIF-1 alpha) with an altered PYI motif at residues 564-566 or a fragment thereof comprising SEQ ID NO:5 or SEQ ID NO:6;

the sequence of SEQ ID NO:2; and

a candidate agent under conditions whereby, but for the presence of said agent, said isolated protein mediates VHL-dependent degradation or physically interacts with VHL at a reference affinity;

detecting the binding affinity of said isolated protein to SEQ ID NO:2 to determine an agent-biased affinity by monitoring an inhibition or activation of transactivation/degradation of HIF-1 alpha;

wherein a difference between said reference affinity and said agent-biased affinity indicates that said agent modulates the functional activity of said isolated protein to said sequence of SEQ ID NO:2.

34. (Cancelled) .

35. (Original) The method of claim 33 wherein the incubation is at normoxia.

36. (Original) The method of claim 33 wherein the incubation is at hypoxia.

37-66. (Cancelled) .